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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 14

Application Number: 08/767,928
Filing Date: December 17, 1996
Appellant(s): DRYER, David C. et al.

Andrea Pair Bryant
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 16 October 2000.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

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A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-8.

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

- A) Only claims 1-7 are rejected under 35 USC §101.
- B) Only claims 1, 5, and 8 were rejected under 35 USC §102(e)

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(7) *Grouping of Claims*

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because claim 9 was not rejected; it was objected to. On that basis, claim 9 should be removed from Group 2.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,790,789

Suarez

8-1998

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 5, and 8 are rejected under 35 U.S.C. §102(e). This rejection is set forth in prior Office action, Paper No. 4.

(11) *Response to Argument*

Applicant bases his appeal on several arguments:

A.

“Applicants refer to AT&T v. Excel Communications, 172 F.3d 1352, 1353, CAFC. That decision notes that the Supreme Court has construed §101 broadly as to “include anything under the sun that is made by man.” The Court discusses that mathematical formulas alone with no use recited in the claim are not statutory. Where there is a use recited, that is, the mathematical formula or algorithm has been reduced to a practical application, then the invention as claimed

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fits within the constrains of §101. AT&T, 172 F.3d 1352, 1357.” Appellant’s Brief, Page 5, last paragraph. (emphasis added)

Applicant is overstating the breadth of §101. “Anything made by man” would include *artistic expressions* that are more properly the subject of Copyright than Patent. Such things do not have a “practical use” in the sense of what is patentable. Furthermore, “anything made by man” would include “mathematical constructions” that have been famously held by the Supreme Court in *Diamond v. Diehr* to be *per se* violative of §101 doctrine because they are so abstract that they close entire fields of research from *further* patent protection and, in the long run, actually *inhibit* innovation rather than promoting it.

The whole purpose of the Patent Office is to *promote* innovation, not to blindly grant such broad protections that innovation is actually inhibited.

In a similar vein to “mathematical constructions”, Examiner reasons that abstract “logical constructions” would also be *per se* violative of §101 doctrine because “logical constructions” are actually *boolean* (base 2) “mathematical constructions” which are clearly included in the “mathematical constructions” that have been famously held by the Supreme Court in *Diamond v. Diehr* to be *per se* violative of §101 doctrine.

Finally, it can be easily shown that Applicant’s statement regarding the findings of the Federal Circuit in AT&T v Excel is quite misleading. In that same case, the Federal Circuit actually *validated* the use of *Warmerdam* to make §101 rejections. The court noted that:

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"Finally, the decision in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that '*taking several abstract ideas and manipulating them together adds nothing to the basic equation*'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101." (emphasis added) *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

Examiner finds that this recital from AT&T much more accurately states the Federal Circuit's method of analyzing §101 issues. Examiner principally relies on *Warmerdam* to reject the claims under §101 because *Warmerdam* is within the *Alappat -- Warmerdam -- State Street Bank* line of cases and because the Federal Circuit *specifically went out of its way* in *AT&T* to say that *Warmerdam* was good law.

B.

"The Examiner made his §101 rejection having reference to a portion of the "35 U.S.C. §101 Computer-Implemented Invention Guidelines Section IV.B.2.(a)(I)" (Guidelines). The Examiner asserts that the underlying process of Applicants' claims is non-statutory and refers back to Paper No. 2, the first Office Action, mailed October 14, 1998, for his reason. Having reference to claim 1, the Examiner found "no pre or post computer activity of the type that would put this claim into a safe harbor since all the activity takes place inside the computer." The Examiner cited *In re Gelrovatch and Aref*, 201 USPQ 136, 145, in deciding that claim 1 as originally filed was non-statutory.

Applicants believe their arguments advanced herein, based on cases decided by the CAFC after the Guidelines were published, overcome the Examiner's contention regarding §101 and the claims on appeal. The Guidelines state on page 1 that the Freeman-Walter-Abele test may be relied upon. Yet, the State Street court states, "After *Diehr* and *Chakrabarty*, the Freeman-Walter-Abele test has little, if any, applicability to determining the presence of statutory subject matter." 149 F.3d 1369, 1374. The court refers to *In re Alappat*, 33 F.3d 1526, 1543. As the State Street court continues, we are instructed to look for a "useful, concrete and tangible result". "However, after *Diehr* and *Alappat*, the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it

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nonstatutory subject matter, unless, of course, its operation does not produce a 'useful, concrete and tangible result.'" 149 F.3d 1368, 1374. The present claims describe a technique for determining which intelligent GUI agent to present to the user machine interface. This is, indeed, a useful, concrete and tangible result which, again, indicates that the underlying process is patentable subject matter."

Examiner does not specifically rely on the *Freeman-Walter-Abele* test. Examiner does make use of that case to suggest some conventional ways that Applicant could make the claims statutory, but of course, more than the *Freeman-Walter-Abele* test is required by the Federal Circuit to reject nonstatutory claims -- that is why the Federal Circuit provided the guidance in *Warmerdam* and *AT&T*, as discussed by Examiner above.

Regarding the "system" and "computer readable medium" recitals in the claims, the invention is still found to be nonstatutory. Any other finding would be at variance with current case law. Specifically, the Federal Circuit held in *AT&T* that:

"Whether stated implicitly or explicitly, we consider the scope of Section 101 to be the same regardless of the form -- machine or process -- in which a particular claim is drafted." *AT&T v. Excel*, 50 USPQ2d 1447, 1452 citing *In re Alappat*, 33 F.3d at 1581, 31 USPQ2d at 1589 (Rader, J., concurring)

A "computer readable medium" recital requires Examiner to interpret the claim as a "product of manufacture", but that does not make the claim *per se* statutory. According to the above holding from the Federal Circuit, the scope of Section 101 *does not change* because one decides to invoke a new type of subject matter of Patent. If an invention would be nonstatutory as a "process", the words "system" or "product of manufacture" are not magic words to suddenly

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make the invention statutory -- the scope of Section 101 does not change perforce the Federal Circuit.

C.

“The Examiner maintains that Suarez anticipates GUI agents. Applicants disagree. While Suarez shows a user 13 in the figures, there is no discussion apparent to Applicants' attorney of a GUI interface agent for facilitating a user's interaction with the system of, for example, Suarez Fig. 1 or Fig. 5. Agents are disclosed in Suarez for essentially a single purpose-providing communication between services with which the agents are associated.

Applicants assert that Suarez's teaching of enabling a user to assert control over an agent in no way anticipates Applicants' claimed invention for choosing, via the processing system, an appropriate GUI agent for a group of tasks and thereafter displaying that GUI agent when the user attempts to perform a task in that group.”

Applicant's statement that the agents in the cited prior art are “disclosed in Suarez for essentially a single purpose-providing communication between services with which the agents are associated” is erroneous and misleading.

The following is a service that is provided by the prior art that will later be shown to be supported by interface agents. Examiner simply quotes the prior art:

“A developer will typically construct a message that is known to be acceptable to a service and then send that message to the service. In a number of cases, the system provides a function interface to services in which the functions are responsible for constructing messages and sending the messages to a service. For example, the present invention provides a service called the Directory Service which provides information about objects under the control of the system. The Directory Service is a software service which knows how to communicate with the data store that ultimately stores the object information (for example, a Sybase database). Since the Directory Service will be one of the most common services used by a developer.

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the present invention provides function interfaces to the Directory Service. The function interfaces are responsible for taking a request and constructing proper messages and arguments to communicate with the Directory Service. This alleviates some of the development tedium in communicating with commonly used services." Suarez, col. 34, lin. 41-51.

So where do the interface agents come in? Well Examiner quotes further:

"The process of invoking an agent (FIG. 16) and launching the associated service 250 begins with the receipt of a request to invoke a particular agent (block 252). The next step is to send a message to the agent associated with the Directory Service requesting that the Directory Service locate the agent to be invoked and it's definition (block 254)." Suarez, col. 31, lin. 9-14.

Furthermore, the interface agents are also described this way in the prior art:

"One of the primary objectives of the present computing system is to provide services to address and solve specific **user defined** problems." ... "The present system contemplates providing many of the developers tools via a **plurality of application interfaces** which invoke certain capabilities of the present system. Included among these capabilities are the ability to create, modify, or delete services, agents and other objects. In addition, the present system provides application interfaces to support many different transaction capabilities, messaging capabilities, work flow capabilities, parallel processing capabilities and other capabilities commonly found in the related art distributed computing systems." Suarez, col. 29, lin. 60-67; col. 30, lin. 1-12.

But are the interfaces "graphical"? Well, GUIs are well within the broadest reasonable scope of the statement in the prior art that:

"The present system contemplates providing many of the developers tools via a **plurality of application interfaces** which invoke certain capabilities of the present system. Included among these capabilities are the ability to create, modify, or delete services, agents and other objects. In addition, the present system provides application interfaces to support many different transaction capabilities, messaging capabilities, work flow capabilities, parallel processing capabilities and other capabilities commonly found in the related art distributed computing systems." Suarez, col. 30, lin. 4-12.

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Furthermore, the prior art recites that:

"The service library also defines object identifier formats , object identifier codes as well as attribute handles. An attribute handle represents an object identifier for those languages which cannot handle byte streams (e.g. **Microsoft Visual Basic**) and thus cannot utilize true object identifiers.

"More importantly, the service library provides detailed information concerning **agents**, services and other objects contained within the system schema and defines numerous other attributes and codes commonly used in the operation of the distributed computing system."Suarez, col. 25, lin. 4-12.

Anyone that has used Microsoft Visual Basic knows that the code must be entered into (or "imported" into) their **proprietary GUI** for the Microsoft system to interpret it and execute it. Interface Agents assisting in the use of the Microsoft Visual Basic language are *inherently* "GUI Agents."

D.

"The maintenance of statistical information by agents, as described in Suarez, is on its face different from Applicants' use of multivariate statistical analysis on information gathered on three variables: **task difficulty, task importance and task frequency**. See specification page 9, lines 7-9. Applicants describe in detail how mutually exclusive groups of tasks are determined beginning at page 9, line 15 through page 11, line 16. Applicants then recite in the first two steps of claim 1:

"receiving data assessing at least two user assessment variables for each of a plurality of tasks;

performing multivariate analysis on said data to derive from said plurality of tasks at least as many mutually exclusive clusters of tasks as there are intelligent agents to assign;"

Applicants continue to assert, therefore, that the applied language from Suarez in no way anticipates, does not clearly show, and in no manner suggests these steps."

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The three variables Applicant recites, as quoted above, are not in the claims. Rather than simply *amending* the three variables into the claims to further clarify the point, Applicant basically argues that the Specification limits the claim to those three variables.

Examiner is not permitted to “read the Specification into the claim.” The claim is clear on its own and is not limited to those three variables.

E.

“There is no teaching in Suarez of **user assessment variables**, the performance of **multivariate statistical analysis** to determine exclusive groups of tasks based on those user assessment variables, thereafter associating GUI agents with the mutually exclusive groups, and finally, upon user selection of a task, providing the user with an appropriate GUI intelligent agent.”

The argument for “D” above applies here.

F.

“Applicants maintain that neither in that applied section of Suarez, nor indeed anywhere in Suarez, is there a teaching or suggestion of “storing an association linking each of said intelligent agents with one of said mutually exclusive clusters (of tasks)” as applicants’ claim 1 recites. That element of claim 1 also appears in analogous claims 5 and 8. Suarez only associates services with agents and states that services cooperate to perform tasks. Therefore, applicants conclude and assert that the third step of the method of claim 1 is not in anyway anticipated by Suarez.”

Well, the prior art recites that:

“The process of invoking an agent (FIG. 16) and launching the associated service 250 begins with the receipt of a request to invoke a particular agent (block 252). The next step is to send a message to the agent associated with the Directory Service requesting that the Directory Service locate the agent to be invoked and it's definition (block 254).”

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As noted before, users of the prior art system need to interface with the "Directory Service". The associated agent provides that interface. Mutually exclusive tasks are well within the broadest reasonable interpretation of the art because it is not limited otherwise.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

WLS

June 2, 2001

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A handwritten signature in black ink, reading "Mark R. Powell". The signature is written in a cursive style with a large, stylized "M" and "P".

MARK R. POWELL
SUPERVISORY PATENT EXAMINER
GROUP 2700